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Safety of toys —

Part 9: Safety aspects related to mechanical and physical properties — Comparison of ISO 8124-1, EN 71-1 and ASTM F963

Sécurité des jouets —

Partie 9: Aspects de sécurité relatifs aux propriétés mécaniques et physiques — Comparaison entre l'ISO 8124-1, l'EN 71-1 et l'ASTM F963

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Annex B (informative) **Index of requirements by ASTM F963** **115**

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This document was prepared by Technical Committee ISO/TC 181, *Safety of toys*.

This third edition cancels and replaces the second edition (ISO/TR 8124-9:2020), which has been technically revised. The main changes are as follows:

Clause	Change
Clause 1	Modified the standards “ISO 8124-1:2018, EN 71-1:2014+A1:2018 and ASTM F963-17” to “ISO 8124-1:2022, EN 71-1:2014+A1:2018 and ASTM F963-23”.
5.1	Modified Table 3, “Defined terms”, update the order and numbering of the definition.
5.2	Modified 5.2.3 “Ball”, 5.2.15 “Protective cap, cover or tip” and 5.2.16 “Pull or push toy”. Added 5.2.18 “Removable component ” and 5.2.20 “Tabletop, floor, or crib toy”.
6.3	Modified Table 27, “Parameters for reasonably foreseeable abuse tests”, updated the parameters for torque test and tension test. Modified Table 28, “impact medium specifications for the drop test”, deleted the hardness requirement in ISO 8124-1. Added 6.3 h) comparison of tension test method of ISO 8124-1, EN 71-1 and ASTM F963.
6.4	Modified 6.4.3, updated the expanding materials requirements of ISO 8124-1.
6.5	Modified Table 36 “Small parts exemptions”, indicated that small parts exemption does not include removable components such as pen caps in ISO 8124-1.
6.12	Modified Table 55 “Plastic film thickness measurement gauge comparison”, updated the diameter of measuring surface and compression force of plastic film thickness measurement gauge in ISO 8124-1.
6.13	Modified Table 64 “Test methods and equipment used for testing of fixed loops, nooses and tangled loops”, updated the figure of head probe for cords and elastics in ASTM F963.
6.16	Modified Table 73 “Differences of the test method for stability testing”, updated the scope of stability testing in EN 71-1 and exemption of stability testing in ASTM F963. Modified Table 77 “Differences in test methods for dynamic strength test”, updated test method of dynamic strength test.
NOTE The technical changes referred to above include the significant technical changes from the revised document, but this is not an exhaustive list of all modifications from the previous version.	

6.17	Modified 6.17.2 "Ventilation", added options to ventilation requirements in ISO 8124-1 and ASTM F963.
6.19	Modified Table 86 "Differences of requirements for description and dimensions of the improvised projectiles", deleted temperature and humidity requirement for storage of improvised projectiles in ASTM F963.
6.21	Modified Table 95 "Differences in warnings for aquatic toys", updated content and location of warnings.
6.23	Modified 6.23.2 "Braking system", added the operating position of the braking systems.
6.24	Modified Table 101 "Comparison of the test to determine the maximum design speed of electrically driven ride-on toys". Added new speed limitations for electrically driven ride-on toys in ISO 8124-1.
6.25	Modified 6.29 "Percussion caps", added the warning that only use percussion caps recommended by the manufacturer in EN 71-1.
6.27	Modified Table 113 "Comparison of the acoustic requirements", added relevant toy categories in accordance with updates to reference standards. Modified Table 114 "Measurement parameter", added relevant toy types in accordance with updates to reference standards.
6.29	Added 6.38 "Functional toys".
6.30	Modified 6.39 "Toys intended to come into contact with food", added requirements for toys intended to come into contact with food in ISO 8124-1 and ASTM F963.
6.38	Added 6.40 "Inflatable toys".
6.39	Modified Table A.1, "Index of requirements by EN 71-1".
6.40	Modified Table B.1, "Index of requirements by ASTM F963-23".
Annex A	Modified the standards "ISO 8124-1:2018, EN 71-1:2014+A1:2018 and ASTM F963-17" to "ISO 8124-1:2022, EN 71-1:2014+A1:2018 and ASTM F963-23".
Annex B	Modified Table 3, "Defined terms", updated the order and numbering of the definition
NOTE The technical changes referred to above include the significant technical changes from the revised document, but this is not an exhaustive list of all modifications from the previous version.	

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The purpose of this document is to compare and contrast the identified versions of ASTM F963-23, EN 71-1:2014+A1:2018 and ISO 8124-1:2022. This document focuses on the contents of ASTM F963-23, EN 71-1:2014+A1:2018 and ISO 8124-1:2022 as they relate to mechanical and physical properties including scope, definitions, general requirements, warnings and test methods.

For ease of use and readability, ISO 8124-1:2022, Clause 4 is listed in Clause 6. For example, ISO 8124-1:2022, 4.3 relates to 6.4.

This document is an overview and, therefore, does not cover the entirety of all the differences among ISO 8124-1, ASTM F963-23 and EN 71-1. In addition, this document is not intended to be relied on to fully understand conformity with ASTM F963-23, EN 71-1:2014+A1:2018 and ISO 8124-1:2022 or the requirements within them. In the case of any discrepancies in the comparisons presented, refer to the relevant clauses of the referenced standards.

The index of requirements in EN 71-1 is given in Annex A.

The index of requirements in ASTM F963-23 is given in Annex B.